# SYSTEM AND METHOD FOR GENERATING INTEGRATED DATA MODELS

## ABSTRACT OF THE DISCLOSURE

A system and method for automatically and rapidly generating an integrated data model of a manufactured product are provided. An input file containing parameters for
5   the manufactured product comprising, for example, dimensions of the finished product, dictates the dimensions of the resulting integrated data model. A rules database constrains modeling to integrate the engineered properties of the resulting model. The properties and materials are defined responsive to the parameters set forth in the input file, and selected according to a predetermined set of properties and materials rules for each component of
10   each system comprised within the product. Successive iterations of the modeling process with informed changes to the input file or rules should yield better approximations of the finished product, thereby allowing immediate and incremental improvements by all engineering disciplines.

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